

217/782-2113

"REVISED"
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT
NSPS SOURCE

PERMITTEE

Marathon Ashland Petroleum LLC
Attn: D. E. Siebold, Manager, TT & M HES
539 South Main Street
Findlay, Ohio 45840

Application No.: 74120180 I.D. No.: 201813AAD
Applicant's Designation: ROCK20-5DOME Date Received: April 19, 2002
Subject: Storage Tank 20-5 Geodesic Dome
Date Issued: May 16, 2002 Expiration Date: December 5, 2005
Location: 7312 Cunningham Road, Rockford

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of storage tanks (three external floating roof tanks, three internal floating roof tanks, and eleven fixed roof tanks), additive storage tank, three bottom loading islands with vapor collection system (John Zink vapor combustor) with a portable vapor combustor as backup control, an air stripper and two wastewater accumulation/air sparging tanks pursuant to the above referenced application. This Permit is subject to standard conditions attached hereto and the following special conditions:

- 1a. This federally enforceable state operating permit is issued to limit the emissions of volatile organic material (VOM) and hazardous air pollutants (HAP) from the terminal to less than major source thresholds (i.e., 100 tons/yr for VOM, 10 tons/yr for a single HAP and 25 tons/yr for combined HAPs), as further described in Attachment A. As a result, the source is excluded from requirements to obtain a Clean Air Act Permit Program permit.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes the current operating permits issued for this location.
- 2a. The loading racks with vapor combustion system is subject to the New Source Performance Standard (NSPS) for Bulk Gasoline Terminals, 40 CFR 60, Subparts A and XX. The Illinois EPA is administering these standards in Illinois on behalf of the United States EPA under a delegation agreement.
- b. The vapor combustion systems shall be designed and operated in accordance with 40 CFR 60.502(d), (h) and (i).

- c. Loading into gasoline tank trucks shall be limited to vapor-tight trucks, using the procedures specified by 40 CFR 60.502(e), (f) and (g).
- d. The total organic emissions from either vapor combustion system shall not exceed 35 milligrams per liter of gasoline loaded, pursuant to 40 CFR 60.502(b).
- 3a. The gasoline storage tank (95-6) is subject to New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and Ka. Tanks 15-2, 20-4, 20-5, 20-7, 20-8 and 67-9 are subject to Subparts A and K. The Illinois EPA is administering these standards in Illinois on behalf of the United States EPA under a delegation agreement.
- b. The 95-6 tank shall comply with the equipment standards contained in the NSPS, 40 CFR 60.112a(a)(1) and all the other above mentioned tanks shall comply with 40 CFR 60.112(a)(1).
- 4. The Permittee shall notify the Illinois EPA of any change in the type of material stored that are different than those identified in the application.
- 5a. Emissions of volatile organic material, materials stored and throughput of equipment shall not exceed the following:

<u>Equipment</u>	<u>Throughput (Gal/Yr)</u>	<u>VOM Emissions (Tons/Yr)</u>
Loading Racks	530,000,000	39.5
4 Gasoline Tanks	313,000,000	30.0
4 Fuel Oil Tanks	200,000,000	1.4
6 Additive Tanks	1,540,000	5.44
2 Transmix Tanks	1,470,000	1.7
1 Ethanol Tank	30,000 000	0.20
1 Air Stripper		0.44
Oil/Water Separators		<u>0.48</u>
	Total	79.16

- b. When the back-up vapor combustion unit is the control device, loading of gasoline shall not exceed 2000 gallons/minute and 50,000 gallons/year.
 - c. This permit is issued based on no increase in emissions from the installation of a geodesic dome on Tank 20-5 and no rules or regulations applying to the secondary seal.
- These limits are based on maximum throughputs, Tanks 3.1, test data and manufacturer's data for the vapor combustors. Compliance shall be determined from a running total of 12 months of data.
- 6a. At all times, the Permittee shall also maintain and operate the loading rack, including the vapor combustion system, in a manner consistent with good air pollution control practice for minimizing emissions, pursuant to 40 CFR 60.11(d).

- b. The Permittee shall only allow trucks that have had an annual leak test in accordance with 40 CFR 60.505 to be filled at the truck loading rack.
 - c. The Permittee shall fulfill applicable notification and record keeping requirements of 40 CFR 60.7 and NO.60.505.
- 7a. The vapor combustion unit shall be equipped with a continuous temperature indicator and chart recorder or disk storage for the vapor combustion unit combustion chamber temperature. The Permittee shall retain all records of equipment operation and strip charts or disk storage for at least one year from the date of occurrence. These records shall be kept at a central location and will be made available for inspection by the Illinois EPA upon 48 hour notice.
- b. The Permittee shall operate the vapor combustion unit with no visible emissions except for periods not to exceed a total of 5 minutes during any two consecutive hours.
 - c. The Permittee shall maintain and operate the vapor combustion unit in accordance with 40 CFR 60.18.
8. Pursuant to 35 Ill. Adm. Code 215.582(c), the Permittee shall provide a pressure tap or equivalent on the vapor collection system. The vapor collection system and the gasoline loading equipment shall be operated in such a manner that it prevents the gauge pressure from exceeding 18 inches of water and the vacuum from exceeding 6 inches of water and to be measured as close as possible to the vapor hose connection.
- 9a. Volatile organic liquid storage tanks constructed or modified after May 18, 1978 and prior to July 23, 1984, e.g., Tank No. 95-6, are subject to the New Source Performance Standards (NSPS), 40 CFR 60 Subparts A and Ka for Volatile Organic Liquid Storage Vessels. The Illinois EPA is administering these standards in Illinois on behalf of the United States EPA under a delegation agreement.
- b. Tank No. 95-6 shall comply with the equipment standards contained in 40 CFR 60.112a for a tank equipped with an internal floating roof.
 - c. At all times the Permittee shall maintain and operate its tanks subject to the NSPS in a manner consistent with good air pollution control practice for minimizing emissions, pursuant to 40 CFR 60.11(d).
10. Gasoline and other material with a vapor pressure of 2.5 psia or greater shall only be loaded out through the loading rack, using submerged loading, and only with the vapor control system properly operating.
11. For the purpose of these requirements:
- i. For purposes of this permit, gasoline means commercial quality gasoline and blend stocks for commercial quality gasoline.

- ii. A petroleum product shall be considered to be a distillate material if the true vapor pressure is less than 0.01 psia at 70°F.
 - iii. An interface material shall be considered to be gasoline if it is shipped for use as a motor vehicle fuel without further processing.
- 12. The Permittee shall fulfill the Testing and Procedures requirements of 40 CFR 60.113a for storage tanks subject to the NSPS, 40 CFR 60, Subpart Ka.
- 13a. Each calendar month, the Permittee shall inspect the vapor combustion systems and the gasoline loading racks for total organic compound liquid or vapor leaks during the loading of gasoline tank trucks, pursuant to 40 CFR 60.502(j).
- b. The Permittee shall inspect the components of the vapor combustion systems which carry volatile organic material (VOM) vapors for leaks according to the following intervals:
 - i. Pump seals shall be inspected visually every week.
 - ii. All valves and the coupler that connects to the delivery vessel shall be inspected by a portable detection unit between March 1 and April 30 of each year. All leaks shall be promptly repaired and a reinspection made within 3 months on those valves which were leaking.
- c. Each detection of a leak shall be recorded and the component repaired as soon as practicable, but not later than 15 days after the leak is detected.
- 14. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the nuisance.
- 15a. This permit is issued based upon the operation of a John Zink vapor combustion unit to control emissions of vapors from the loading racks. During malfunction or breakdown, the portable vapor combustion unit shall be operated as back-up.
- b. If a simultaneous malfunction or breakdown of both units occurs such that there is no control of emissions from loading operations, Permittee will notify the IEPA Regional office in Collinsville at 618/345-0700 on the same or next working day. The time of occurrence and type of malfunction and breakdown shall be given.
- c. The Permittee shall submit an annual report summarizing the quantity of emissions, the type and the duration of each simultaneous malfunction, and the steps taken to reduce the occurrence of each simultaneous malfunction or breakdown.

- d. Operation during simultaneous malfunction and breakdown of both units is allowed for a period of 72 hours.
 - e. If the simultaneous malfunction and breakdown cannot be corrected within 72 hours the Permittee shall notify the Regional Office and the Regional Office may allow operation during malfunction and breakdown for a longer period of time on a case-by-case basis.
 - f. The Permittee shall only be allowed to operate any loading operations during a malfunction or breakdown, pursuant to Section 201.262. Operation under malfunction or breakdown will only be allowed to finish loading the truck which was being filled during the malfunction or breakdown.
16. As a consequence of this federally enforceable state operating permit limiting HAP emissions to below 25 tons/year, the Permittee will not be required to demonstrate applicability of 40 CFR Parts 9 and 63 (NESHAP for Source Categories: Gasoline Distribution) for this facility.
- 17a. Within 90 days of a written request from the Illinois EPA or USEPA the VOM emissions from the loading racks shall be measured during conditions which are representative of the maximum performance. The Illinois EPA may provide additional time for the performance of this testing upon request from the Permittee which shows that it is not feasible to perform representative testing within 90 days.
- b. The performance test shall be performed in accordance with the methods specified in 40 CFR 60.503 for Bulk Gasoline Terminals.
 - c. Testing shall be performed by a qualified independent testing service.
 - d. At least 30 days prior to the actual date of testing a written test plan shall be submitted to the Illinois EPA for review and approval. A copy shall also be submitted to the USEPA. This plan shall describe the specific procedures for testing, including:
 - i. The person(s) who will be performing sampling and analysis and their experience with similar tests.
 - ii. The conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum operating rate, the levels of operating parameters at or within which compliance is intended to be shown, if applicable, and the means by which the operating parameters for the process and any control equipment will be determined.
 - e. The Illinois EPA shall be notified prior to these tests to enable the Illinois EPA to observe these tests. Notification for the expected date of testing shall be submitted a minimum of thirty (30) days prior to the expected test date. Notification of the actual date and expected time of testing shall be submitted a minimum of five (5) working days prior to the actual date of the test. The Illinois EPA may, at its

discretion, accept notification with shorter notice provided that the Illinois EPA will not accept such notifications if it interferes with the Illinois EPA's ability to observe the testing.

- 18a. The Final Report(s) for the tests specified in Condition 18 shall be submitted within 180 days after the date of the test. The Final Report shall include as a minimum:
- i. General information describing the test, including the name and identification of the emission source which was tested, date of test, name of personnel performing the tests, and Illinois EPA observers, if any;
 - ii. A summary of results;
 - iii. Description of test procedures, including description of sampling points, test equipment, and test schedule;
 - iv. Detailed description of test conditions, including:
 - A. Process information, i.e., process rate, material loaded, etc.
 - B. Control equipment information, i.e., equipment condition and operating parameters during testing.
 - v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.
- b. Submittals of information shall be made as follows:
- i. Notices of Test - one copy to Source Emission Test Specialist and one copy to the Regional Office.
 - ii. Final Report - three copies to the Compliance Monitoring Unit.

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

19. The Permittee shall follow monitoring and maintenance requirements of 40 CFR 60.113(a)(1) for Tank 95-6 and 40 CFR 60.113 for all other gasoline storage tanks.
20. The Permittee shall follow reporting and recordkeeping requirements of 40 CFR 60.115(a) for Tank 95-6.
21. Emissions of organic material into the atmosphere shall not exceed 3.6 kg/hr (8 lbs/hr) during the loading of any organic material from the aggregate loading pipes of any loading area having throughput of greater

than 151 cubic meters per day (40,000 gal/day) into any railroad tank car, tank truck or trailer unless such loading area is equipped with submerged loading pipes or an equivalent device (35 Ill. Adm. Code 215.122(a)).

- 22a. The Permittee shall comply with the control requirements of 35 Ill. Adm. Code 215.121(b)(1) for all gasoline storage tanks equipped with floating roofs.
- b. All tanks at the facility shall have submerged loading or no odor nuisance to show compliance with 35 Ill. Adm. Code 215.122(b)(c).
23. The Permittee shall operate the loading racks in compliance with 35 Ill. Adm. Code 215.582.
24. The Permittee shall keep monthly records of the following items:
- i. The throughput of gasoline and other products through the loading rack (gal/month).
 - ii. Records of the throughput for each type of material stored and in which tank.
 - iii. Records of loadout for each material other than gasoline.
 - iv. Inspections of the vapor collection system, vapor control device and each gasoline loading bay at the truck loading rack.
- b. For each calendar month in which gasoline throughput exceeds 20,000,000 gallons the Permittee shall maintain records of the annual VOM and HAP emissions of each material, determined as the sum of the emission data for each month and the previous eleven months. Calculations of the VOM and HAP emissions of each material for storage and loadout shall be determined using the appropriate USEPA procedures, e.g., USEPA's "Compilation of Emission Factors," in AP-42.
- c. The Permittee shall also maintain records of the following items:
- i. Truck operators' pre-loading certification of vapor tightness documentation for each gasoline tank truck loaded at the facility.
 - ii. The tank identification number of each truck loaded at the facility.
 - iii. Results of all performance tests conducted on the vapor collection system.
 - iv. Weekly inspections of vapor collection system pump seals.
 - v. Inspections and other compliance requirements for tanks subject to 40 CFR 60 Subpart Ka and K.

- vi. The Permittee shall fulfill all reporting and recordkeeping requirements of 40 CFR 60.505 (a) - (f).
- 25. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year: throughput of all materials (petroleum products, distillates, additives, etc.) stored and in which tanks, throughput of all materials through loading racks and volatile organic material (VOM) emissions calculations from the prior calendar year.
- 26. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.
- 27. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
- 28. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
- 29. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
5415 North University
Peoria, Illinois 61614

Page 9

Please note all materials handled by this facility must be included in the total throughput limit. This includes material transferred between pipeline, barge, truck and/or railcar.

Please note that this permit has been revised to reflect an increase in the allowed throughput of Ethanol and to increase the emissions from the gasoline storage tanks due to the updated Tanks Program.

If you have any questions regarding this permit, please call Eric Jones at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:EEJ:jar

cc: IEPA, FOS, Region 2
IEPA, CMU
USEPA

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the bulk gasoline terminal operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. This is handling 530,000,000 gallons of materials. The resulting maximum emissions are well below the levels, e.g., 100 tons per year of VOM, 25 tons per year of combined HAPs and 10 tons per year of single HAP at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

1. Emissions of volatile organic material, materials stored and throughput of equipment shall not exceed the following:

<u>Equipment</u>	<u>Throughput (Gal/Yr)</u>	<u>VOM Emissions (Tons/Yr)___</u>
Loading Racks	530,000,000	39.5
4 Gasoline Tanks	313,000,000	30.0
4 Fuel Oil Tanks	200,000,000	1.4
6 Additive Tanks	1,540,000	5.44
2 Transmix Tanks	1,470,000	1.7
1 Ethanol Tank	30,000 000	0.20
1 Air Stripper		0.44
Oil/Water Separators		<u>0.48</u>
	Total	79.16

2. Emissions of hazardous air pollutants (HAP) from the terminal shall not exceed 10 tons/year for any individual HAP, nor 25 tons/year for all HAPs combined.

DES:EEJ:jar

